

### **Dedication Program**

MARKING THE OPENING

of the

Duluth-Superior High Bridge

SATURDAY, DECEMBER 2 1961

THE OLD AND NEW BRIDGES SPANNING ST. LOUIS BAY

Wisconsin Highway Commission Photo





## Greetings from MINNESOTA'S Governor Andersen

This is a day of great significance for Superior and Duluth as well as for all of Wisconsin and Minnesota.

This beautiful and efficient bridge holds an unlimited potential for social and ecomonic good which will range far beyond these two communities and this area.

The new Duluth-Superior High Bridge performs another very important specific function in that it provides a convenient link between the people of these two great commonwealths.

It is significant also that this handsome structure has safety built into it—a factor of great importance in this era of an ever-mounting list of traffic tragedies.

The new bridge will bring countless benefits to the people in this area and I am happy and proud to be part of this program today marking its completion.

Elmer L. Andersen Governor of Minnesota



#### "A Thing of Beauty Is a Joy Forever . . ."

. . . in this case, the new Duluth–Superior High Bridge, besides possessing functional beauty, fulfills a long felt need as a safe and convenient link between the two important Twin-Port cities.

Public and private marine terminals in Duluth-Superior this past year have handled more than twice as much general and bulk cargo—exclusive of grain—as they did in 1960.

During the current navigation season through October 31 Twin-Ports facilities handled 176,792 tons of export and import cargo compared with 86,234 tons in 1960.

The Duluth port authorities' public marine terminal recorded a jump in total tonnage from 16,736 in 1960 to 69,182 tons in 1961.

Export cargoes at the terminal are up from a mere 3,215 tons in 1960 to an impressive 59,625 tons during the current year.

Scrap iron loadings at the public terminal and at private wharves have climbed from 46,240 tons last year to a prodigious 113,335 tons in 1961.

The Duluth Board of Trade reports export grain shipments were up from 2,064,728 tons last year to 2,099,338 tons this year.

The completion of the new High Bridge, in addition to providing safe and comfortable travel for intercity vehicular traffic, will make more convenient the movement of ships from all parts of the world into and out of the Twin-Port cities.

# Greetings from wisconsin's Governor Nelson



Completion of the new Duluth—Superior High Bridge today marks an important milestone in the economic and social development of this area.

A combination of thoughtful planning on the part of our people and government officials at all levels has resulted in this beautiful structure which will serve us far into the future.

Remarkable engineering skills combined with able and talented labor have given us an impressive facility over which our people and our goods can move with safety, convenience and comfort.

I extend my congratulations and appreciation to those of you who recognized the need, to those engineers who planned the bridge, and to those talented men who built it.

I am proud to join you today in dedicating this functional and beautiful structure.

Gaylord A. Nelson Governor of Wisconsin



THE BRIDGE FROM THE DULUTH SHORE

Wisconsin Highway Commission Photo



#### THE PROGRAM ON THE BRIDGE

DECEMBER 2, 1961, 11:00 A.M.

Robert K. Prescott, President, Duluth City Council, Master of Ceremonies

Selections-Superior Cathedral High School Band Duluth Denfeld High School Band

Invocation-Dr. Winfield Haycock, Pastor, First Methodist Church, Duluth

Welcome-Superior Mayor Lawrence Hagen and Duluth Mayor E. Clifford Mork

Introduction of Guests by Mr. Prescott

Greetings-Harvey Grasse, Chairman, Wisconsin State Highway Commission and James Marshall, Commissioner, Minnesota Department of Highways

Remarks-Gov. Gaylord Nelson of Wisconsin and Gov. Elmer L. Andersen of Minnesota

Ribbon-Cutting Ceremonies-Followed by Official Opening of the Bridge

NOTE: At 9:30 A. M. news media personnel will interview officials at the Duluth Municipal Port Terminal at the north end of the

NOTE: The Chambers of Commerce of Duluth and Superior will be hosts at a coffee hour from 10 A. M. to 10:45 A. M. in the Duluth Municipal Port Terminal for guests and members of the official party and newsmen.

NOTE: The cavalcade will assemble at the Duluth end of the bridge at 10:45 A. M. and proceed to the center span.

#### THE LUNCHEON PROGRAM

AT SUPERIOR STATE TEACHERS COLLEGE CAFETERIA 12:45 P. M., DECEMBER 2, 1961

Master of Ceremonies-Dr. Jim Dan Hill, President of Superior State College

National Anthem

Introduction of Guests by Dr. Hill

Invocation-The Most Rev. George A. Hammes, Bishop of the Diocese of Superior

Greetings-Gov. Elmer L. Andersen of Minnesota

Welcome-Gov. Gaylord A. Nelson of Wisconsin

Address-U. S. Rep. John A. Blatnik of Minnesota, Member of Government Operations Committee and Public Works Committee

Main Address-Rex Whitton, Federal Highway Administrator

Remarks-U. S. Rep. Alvin O'Konski of Wisconsin

U. S. Sen. Eugene McCarthy of Minnesota U. S. Sen. Alexander Wiley of Wisconsin

U. S. Sen. Hubert H. Humphrey of Minnesota

U. S. Sen. William Proxmire of Wisconsin

#### This Is Our Bridge . .

. . a functional and exquisitely beautiful facility, part of the nation's 41,000 miles of four-lane highways, extending from Maple Street in Duluth to Third Street in Superior, a distance of 7,975 feet. This impressive engineering feat rises from the tip of steel piling 110 feet below the elevation of Lake Superior to 204 feet above the water, allowing ocean-going vessels to pass under the intricately designed high truss over St. Louis Bay.

Work on this 16.5 million dollar structure began in November of 1958. During the next 35 months, 173,000 feet of steel and concrete piling, 60,100 cubic yards of concrete, 3,100 tons of reinforcing steel, 13,400 tons of structural steel, 30,000 cubic yards of earth, and 28,000 feet of electrical wiring were methodically placed to erect the structure which majestically rises above St. Louis Bay, connecting the industrial cities of Duluth and Superior.

The structure has about 2,000 feet of its length in Minnesota and 5,975 feet in Wisconsin. Approach construction extends an additional 1,800 feet in Minnesota, and 1,000 feet in Wisconsin, Thus, current construc-

tion extends about 2.0 miles overall.

The center span, which is over the navigation channel between St. Louis Bay and Superior Bay, provides 120 feet of vertical clearance for a width of 500 feet. The structure also spans a second channel in Wisconsin known as Howard's Pocket and provides 100 feet of vertical clearance for a width of 150 feet.

The structure carries two 27-foot concrete roadways which are separated by a 4-foot wide steel grating

median. Roadway grades are 3.7 percent on the Minnesota side and 3.5 percent in Wisconsin.

On the Duluth Approach, 425,000 cubic yards of sand-gravel fill was placed, 50,000 cubic yards of earth was excavated. 12,700 tons of crushed stone were used to construct an 8-inch base course. 4,400 tons of bituminous surfacing was required for the pavement and 4,700 lineal feet of reinforced concrete culvert pipe of various sizes were installed.

On the Superior Approach, 25,000 cubic yards of sand-gravel fill was placed, 36,000 cubic yards of earth was excavated, and 7,500 lineal feet of reinforced concrete culvert pipe of various sizes were installed. 20,000 tons of gravel or crushed stone were used to form an 8-inch base course, and 28,000 square yards of con-

crete were used to construct the final roadway.

The graceful, new, toll-free structure will be available to vehicular traffic now using the Interstate Toll Bridge, a combination highway and railroad facility built in 1897. The older bridge is the property of the Duluth-Superior Bridge Company, a subsidiary of the Great Northern Railway Company.

About three miles west of the new Interstate Structure is another toll facility, the Arrowhead Bridge. built in 1926 and owned and operated by the Arrowhead Bridge Company of Superior. This facility carries

only highway and pedestrian traffic.

Recent traffic counts show that present vehicular traffic on the two older bridges is divided: 69.5 Percent on the Interstate Bridge and 30.5 Percent on the Arrowhead Bridge.

In 1950, according to records, the Interstate Bridge carried 1,606,000 vehicles, while the Arrowhead carried 804,000 making a total of 2,410,000. It has been conservatively estimated that traffic over these two

bridges has increased by approximately 35 percent.

It also has been estimated that with the opening of the Straits of Mackinaw bridge between St. Ignace and Mackinaw City in Michigan the traffic for the head of the lakes area and Canada will increase by 25 percent.

The principal highways entering the Superior-Duluth area are U.S. highway 2, U. S. highway 53, U. S. highway 61, Minnesota state trunk

highway 23, Wisconsin state trunk highways 35 and 13.

The vehicular traffic crossing between the two cities and two states should be classified as "local cross-bay traffic" and "through cross-bay traffic." The Interstate Bridge provides the most direct crossing and receives approximately 70% of both "local-cross" and "through-cross" bay traffic.

Duluth and Superior have for many years endeavored to successfully bring about a program for the construction of a modern high level bridge across the harbor. The residents of the two cities are justly proud and immensely happy upon seeing the dream of many years become a

The 64-year old landmark, the Interstate Toll Bridge, after serving the area faithfully all these years, has given way to its successor, the modern, toll-free Interstate Bridge in a new era of land and water transportation.

#### "ALL-WISCONSIN" MENU

Cranberry Juice Cocktail Assorted Relish Tray Molded Fruit Salad Gourmet Breast of Chicken Stuffed with Wild Rice

Oven Brown Potatoes Hot Rolls and Butter Dutch Apple Pie with Cheddar Cheese Coffee (the only import!)



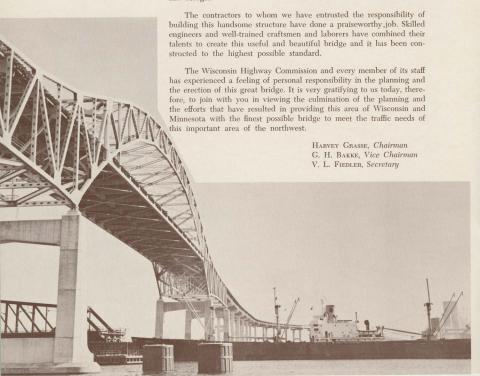
# A MESSAGE FROM THE WISCONSIN HIGHWAY COMMISSION

As we look today upon this completed interstate bridge stretching its welcoming approaches into two of this area's most modern cities we feel a special pride in the fact that the Wisconsin highway commission had a part in its creation.

A new high interstate bridge of this type was very definitely needed. Traffic counts on the older bridges here showed definitely that a new facility had to be provided if we were to adequately handle the astonishing increase in the number of pleasure cars, buses, trucks and other vehicles in this area. Your communities have shown commendable vision and foresight in recognizing this need.

Conservative estimates tell us that we can expect to see 75 to 80 million vehicles on our nation's highways by 1965. Duluth and Superior, of course, as well as St. Louis and Douglas Counties will draw their share of this vast traffic load. You have shown sensible foresight in

planning this improvement so that your communities will not be handicapped by the congestion that comes with inadequate roads and streets and bridges.

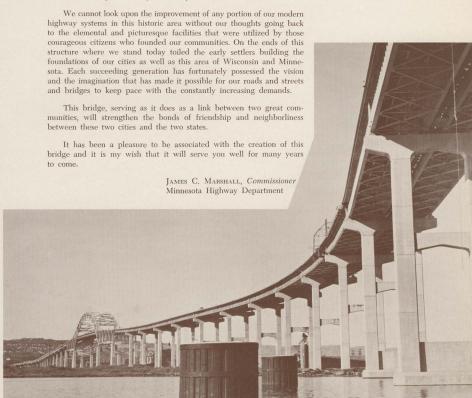


## A MESSAGE FROM THE MINNESOTA HIGHWAY DEPARTMENT

When plans are announced for the construction of a bridge of this type, the responsibilities at the state highway department level are always an exciting and interesting challenge. Members of the Minnesota Highway Department staff involved with the plans and the construction of this beautiful and functional facility have experienced great personal pride in the project and we are especially happy to join with you today to observe its completion.

Members of our staff found complete and enthusiastic cooperation from property owners, shipping officials, as well as from city, county, state, and Federal Government officials.

As highway commissioner, I want to personally commend the men who made this project a reality—the skilled hands and trained minds of the craftsmen who drew the plans, who guided the piledrivers and giant cranes, the hands that connected the girders, the riveters, the painters—all who contributed their labor on this great structure deserve our sincere commendation. We are proud of a job which you have done well.



#### WELCOME . . .

Those of us who love Wisconsin and Minnesota welcome you to share the attractions of this unusual area with its clear lakes and streams, the quiet beauty of our forests, the quick excitement of startled wildlife, the swimming, fishing, hunting and multitude of outdoor sports.

The friendly and hospitable people of Minnesota and Wisconsin, with justifiable pride in our states, extend a cordial invitation to visitors from other states and other countries to use our excellent highways to visit the many points of interest in industry and agriculture and to relax in our unique and beautiful recreational areas.

The completion of this handsome bridge between Minnesota and Wisconsin will provide our citizens as well as tourists and visitors with a most convenient and safe means of traveling between the Twin-Port cities.

#### THE CONTRACTORS

#### WHO BUILT THE BRIDGE

Johnson, Drake & Piper, Incorporated Minneapolis, Minnesota

Kansas City Bridge Company Kansas City, Missouri

United States Steel Corporation New York, New York

Wisconsin Bridge & Iron Co. Milwaukee, Wisconsin

Massman Construction Co. Kansas City, Missouri

Milwaukee Bridge Company Milwaukee, Wisconsin

Lakeside Bridge & Steel Co. Milwaukee, Wisconsin

Al Johnson Construction Co. Minneapolis, Minnesota

Allied Structural Steel Companies Chicago, Illinois

Industrial Construction Company Minneapolis, Minnesota

Highway Pavers, Inc. Wauwatosa, Wisconsin Electric Construction Co.
Duluth, Minnesota

Arcon Construction Co. Mora, Minnesota

Century Fence Co. Waukesha, Wisconsin

Ulland Brothers, Inc. Austin, Minnesota

McLean—Astleford Company Minneapolis, Minnesota

Superior Water, Light & Power Superior, Wisconsin

Soo Line Railroad Co. Minneapolis, Minnesota

Lake Superior Terminal & Transfer Superior, Wisconsin

Design and Construction Consulting Engineers Howard, Needles, Tammen & Bergendoff Kansas City, Missouri